WHAT IS CLAIMED:

1. A process for treating a host mammal having a condition associated with pathological

5 matrix metalloprotease (MMP) activity that comprises administering a metalloprotease inhibitor compound or a pharmaceutically acceptable salt thereof in an effective amount to a mammalian host having such a condition, said metalloprotease inhibitor inhibiting the activity of one or more of MMP-2, MMP-9 and MMP-13, while exhibiting substantially less inhibitory activity against MMP-1, said compound corresponding in structure to formula B, below

$$\begin{array}{c}
(CH_2)_{\overline{n}} \\
X \\
R_{20} \\
C(CH_2)_{\overline{p}} \\
S(O)_g
\end{array}$$

$$\begin{array}{c}
Q \\
A \\
R \\
E
\end{array}$$

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wherein

pharmaceutically acceptable cation or C(W)R²⁵ where W
is O or S and R²⁵ is selected from the group
consisting of an C₁-C₆-alkyl, aryl, C₁-C₆-alkoxy,
heteroaryl-C₁-C₆-alkyl, C₃-C₈-cycloalkyl-C₁-C₆-alkyl,
aryloxy, ar-C₁-C₆-alkoxy, ar-C₁-C₆-alkyl, heteroaryl
and amino C₁-C₆-alkyl group wherein the amino C₁-C₆alkyl nitrogen is (i) unsubstituted or (ii)
substituted with one or two substituents
independently selected from the group consisting of

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an C_1 - C_6 -alkyl, aryl, ar- C_1 - C_6 -alkyl, C_3 - C_8 -cycloalkyl- C_1 - C_6 -alkyl, ar- C_1 - C_6 -alkoxycarbonyl, C_1 - C_6 -alkoxycarbonyl, and C_1 - C_6 -alkanoyl radical, or (iii) wherein the amino C_1 - C_6 -alkyl nitrogen and two substituents attached thereto form a 5- to 8-membered heterocyclo or heteroaryl ring;

g is 2;

m is zero, 1 or 2;

n is zero, 1 or 2;

10 p is zero, 1 or 2;

the sum of m + n + p = 1, 2, 3 or 4;

- (a) one of X, Y and Z is selected from the group consisting of C(0), NR^6 , O, S, S(0), $S(0)_2$ and $NS(0)_2R^7$, and the remaining two of X, Y and Z are CR^8R^9 , and $CR^{10}R^{11}$, or
- (b) X and Z or Z and Y together constitute a moiety that is selected from the group consisting of $NR^6C(0)$, $NR^6S(0)$, $NR^6S(0)_2$, NR^6S , NR^6O , SS, NR^6NR^6 and OC(0), with the remaining one of X, Y and Z being CR^8R^9 , or
 - (c) n is zero and X, Y and Z together constitute a moiety selected from the group consisting of

5 wherein wavy lines are bonds to the atoms of the depicted ring;

 R^6 and R^6 are independently selected from the group consisting of hydrido, formyl, sulfonic- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxycarbonyl- C_1 - C_6 -alkyl,

hydroxycarbonyl- C_1 - C_6 -alkyl, C_1 - C_6 -alkylcarbonyl- C_1 - C_6 -alkyl, R^8R^9 -aminocarbonyl- C_1 - C_6 -alkyl, C_1 - C_6 -

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 $alkoxycarbonyl-c_1-c_6-alkylcarbonyl, hydroxycarbonyl C_1-C_6-alkylcarbonyl$, $C_1-C_6-alkylcarbonyl-C_1-C_6-alkylcarb$ alkylcarbonyl, C₁-C₆-alkoxycarbonylcarbonyl, hydroxycarbonylcarbonyl, C₁-C₆-alkylcarbonylcarbonyl, R^8R^9 -aminocarbonylcarbonyl, C_1 - C_6 -alkanoyl, aryl- C_1 - C_6 -alkyl, aroyl, bis(C_1 - C_6 -alkoxy- C_1 - C_6 -alkyl)- C_1 - C_6 alkyl, C_1-C_6 -alkyl, C_1-C_6 -haloalkyl, C_1-C_6 perfluoroalkyl, C₁-C₆-trifluoromethylalkyl, C₁-C₆- $\tt perfluoroalkoxy-C_1-C_6-alkyl,\ C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkyl)$ alkyl, C3-C6-cycloalkyl, heteroarycarbonyl, 10 heterocyclocarbonyl, C3-C8-heterocycloalkyl, C3-C8heterocycloalkylcarbonyl, aryl, C5-C6-heterocyclo, C₅-C₆-heteroaryl, C₃-C₈-cycloalkyl-C₁-C₆-alkyl, aryloxy-C₁-C₆-alkyl, heteroaryloxy-C₁-C₆-alkyl, ${\tt heteroaryl-C_1-C_6-alkoxy-C_1-C_6-alkyl,\ heteroarylthio-}\\$ 15 $C_1-C_6-alkyl$, arylsulfonyl, $C_1-C_6-alkylsulfonyl$, $C_5-alkylsulfonyl$ C6-heteroarylsulfonyl, carboxy-C1-C6-alkyl, C1-C4alkoxycarbonyl- C_1 - C_6 -alkyl, aminocarbonyl, C_1 - C_6 alkyl(R8N)iminocarbonyl, aryl(R8N)iminocarbonyl, C5- C_6 -heterocyclo(R^8N)iminocarbonyl, arylthio- C_1 - C_6 -20 alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, arylthio-C₃-C₆alkenyl, C_1-C_4 -alkylthio- C_3-C_6 -alkenyl, C_5-C_6 heteroaryl-C₁-C₆-alkyl, halo-C₁-C₆-alkanoyl, hydroxy- C_1-C_6 -alkanoyl, thiol- C_1-C_6 -alkanoyl, C_3-C_6 -alkenyl, $C_3-C_6-alkynyl$, $C_1-C_4-alkoxy-C_1-C_4-alkyl$, $C_1-C_5-alkyl$ 25 alkoxycarbonyl, aryloxycarbonyl, NR⁸R⁹-

(R⁸)iminomethyl, NR⁸R⁹-C₁-C₅-alkylcarbonyl, hydroxy-

 C_1 - C_5 -alkyl, R^8R^9 -aminocarbonyl, R^8R^9 -aminocarbonyl- C_1 - C_6 -alkylcarbonyl, hydroxyaminocarbonyl, R^8R^9 -aminosulfon- C_1 - C_6 -alkyl, R^8R^9 -aminosulfon- C_1 - C_6 -alkylsulfonyl and an R^8R^9 -amino- C_1 - C_6 -alkyl group;

 $\rm R^7$ is selected from the group consisting of a arylalkyl, aryl, heteroaryl, heterocyclo, $\rm C_1$ - $\rm C_6$ -alkyl, $\rm C_3$ - $\rm C_6$ -alkyl, $\rm C_3$ - $\rm C_6$ -alkelyl, $\rm C_1$ - $\rm C_6$ -carboxyalkyl and a $\rm C_1$ - $\rm C_6$ -hydroxyalkyl group;

 R^8 and R^9 and R^{10} and R^{11} are independently 10 selected from the group consisting of a hydrido, hydroxy, C₁-C₆-alkyl, C₁-C₆-alkanoyl, aroyl, aryl, ar-C₁-C₆-alkyl, heteroaryl, heteroar-C₁-C₆-alkyl, C₂- C_6 -alkynyl, C_2 - C_6 -alkenyl, thiol- C_1 - C_6 -alkyl, C_1 - C_6 alkylthio-C₁-C₆-alkyl, cycloalkyl, cycloalkyl-C₁-C₆-15 alkyl, heterocycloalkyl-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁- C_6 -alkyl, aralkoxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy- C_1 - C_6 alkoxy-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, ${\tt hydroxycarbonyl-C_1-C_6-alkyl,\ hydroxycarbonylar-C_1-C_6-alkyl,\ hyd$ alkyl, aminocarbonyl- C_1 - C_6 -alkyl, aryloxy- C_1 - C_6 -20 alkyl, heteroaryloxy- C_1 - C_6 -alkyl, arylthio- C_1 - C_6 alkyl, heteroarylthio-C₁-C₆-alkyl, the sulfoxide or sulfone of any said thio substituents, perfluoro- C_1 - C_6 -alkyl, trifluoromethyl- C_1 - C_6 -alkyl, halo- C_1 - C_6 alkyl, alkoxycarbonylamino-C1-C6-alkyl and an amino-25 C_1 - C_6 -alkyl group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii) substituted with one or two

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radicals independently selected from the group consisting of C_1 - C_6 -alkyl, ar- C_1 - C_6 -alkyl, cycloalkyl and C_1 - C_6 -alkanoyl, or wherein R^8 and R^9 or R^{10} and R^{11} and the carbon to which they are bonded form a carbonyl group, or wherein R^8 and R^9 or R^{10} and R^{11} , or R^8 and R^{10} together with the atoms to which they are bonded form a 5- to 8-membered carbocyclic ring, or a 5- to 8-membered heterocyclic or heteroaryl ring containing one or two heteroatoms that are nitrogen, oxygen, or sulfur, with the proviso that only one of R^8 and R^9 or R^{10} and R^{11} is hydroxy;

 R^{12} and R^{12} are independently selected from the group consisting of a hydrido, C1-C6-alkyl, aryl, ar-C₁-C₆-alkyl, heteroaryl, heteroaralkyl, C₂-C₆-alkynyl, C₂-C₆-alkenyl, thiol-C₁-C₆-alkyl, 15 cycloalkyl, cycloalkyl-C1-C6-alkyl, heterocycloalkyl- $C_1-C_6-alkyl$, $C_1-C_6-alkoxy-C_1-C_6-alkyl$, $aryloxy-C_1-C_6-alkyl$ alkyl, amino-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-alkoxy- $C_1-C_6-alkyl$, hydroxy- $C_1-C_6-alkyl$, hydroxycarbonyl- $C_1-alkyl$ C6-alkyl, hydroxycarbonylar-C1-C6-alkyl, 20 aminocarbonyl-C₁-C₆-alkyl, aryloxy-C₁-C₆-alkyl, heteroaryloxy-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆alkyl, arylthio- C_1 - C_6 -alkyl, heteroarylthio- C_1 - C_6 alkyl, the sulfoxide or sulfone of any said thio substituents, perfluoro-C₁-C₆-alkyl, trifluoromethyl-25 C₁-C₆-alkyl, halo-C₁-C₆-alkyl, alkoxycarbonylamino- $C_1-C_6-alkyl$ and an amino- $C_1-C_6-alkyl$ group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii)

substituted with one or two radicals independently selected from the group consisting of C_1 - C_6 -alkyl, ar- C_1 - C_6 -alkyl, cycloalkyl and C_1 - C_6 -alkanoyl;

R¹³ is selected from the group consisting of a hydrido, benzyl, phenyl, C₁-C₆-alkyl, C₂-C₆-alkynyl, C₂-C₆-alkenyl and a C₁-C₆-hydroxyalkyl group;

-Q-A-R-E-Y is a substituent in which the moiety Q is a 5- to 7-membered heterocyclic ring

10 containing one or two nitrogen atoms one of which is bonded the depicted phenyl group, and whose remaining members (A-R-E-Y) are bonded at the 4-position relative to said phenyl-bonded nitrogen atom when Q is a 6- or 7-membered ring and at the 3- or 4
15 position relative to that nitrogen when Q is a 5-membered ring;

A is selected from the group consisting of

- (1) -0-;
- (2) -S-;
- 20 (3) -NR¹⁷-;
 - (4) $-CO-N(R^{17})$ or $-N(R^{17})-CO-$, wherein R^{17} is hydrogen, C_1-C_4 -alkyl, or phenyl;
 - (5) -CO-O- or -O-CO-;
 - (6) -0-C0-O-;
- 25 (7) —HC=CH-;
 - (8) -NH-CO-NH-;
 - (9) —C≡C-;
 - (10) -NH-CO-O- or -O-CO-NH-;
 - (11) -N=N-;
- 30 (12) -NH-NH-; and

- (13) $-CS-N(R^{18})-$ or $-N(R^{18})-CS-$, wherein R^{18} is hydrogen C_1-C_4 -alkyl, or phenyl; or
- (14) A is absent and Q is bonded directly to R;

R is a moiety selected from the group consisting of alkyl, alkoxyalkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, heteroaralkyl, heterocycloalkylalkyl, cycloalkylalkyl,

- cycloalkoxyalkyl, heterocycloalkoxyalkyl, aryloxyalkyl, heteroaryloxyalkyl, arylthioalkyl, heteroarylthioalkyl, cycloalkylthioalkyl, and a heterocycloalkylthioalkyl group wherein the aryl or heteroaryl or cycloalkyl or heterocycloalkyl
- substituent is (i) unsubstituted or (ii) substituted with one or two radicals selected from the group consisting of a halo, alkyl, perfluoroalkyl, perfluoroalkoxy, perfluoroalkylthio, trifluoromethylalkyl, amino, alkoxycarbonylalkyl,
- alkoxy, C₁-C₂-alkylene-dioxy, hydroxycarbonylalkyl, hydroxycarbonylalkylamino, nitro, hydroxy, hydroxyalkyl, alkanoylamino, and a alkoxycarbonyl group, and R is other than alkyl or alkoxyalkyl when A is -O- or -S-;
- 25 the moiety E is selected from the group consisting of
 - (1) $-CO(R^{19})$ or $-(R^{19})CO$, wherein R^{19} is a heterocycloalkyl, or a cycloalkyl group;
- 30 (2) -CONH- or -HNCO-; and
 - (3) -CO-;

- (4) $-SO_2-R^{19}$ or $-R^{19}-SO_2$;
- $(5) -SO_2 -;$
- (6) $-NH-SO_2- \text{ or } -SO_2-NH-;$
- (7) -S-;
- (8) -NH-CO-O- or -O-CO-NH-; or
- (9) E is absent and R is bonded directly to Y; and

the moiety Y is absent or is selected from the group consisting of a hydrido, alkyl, alkoxy, haloalkyl, aryl, aralkyl, cycloalkyl, heteroaryl, 10 hydroxy, aryloxy, aralkoxy, heteroaryloxy, heteroaralkyl, perfluoroalkoxy, perfluoroalkylthio, trifluoromethylalkyl, alkenyl, heterocycloalkyl, cycloalkyl, trifluoromethyl, alkoxycarbonyl, and a aminoalkyl group, wherein the aryl, heteroaryl, 15 aralkyl or heterocycloalkyl group is (i) unsubstituted or (ii) substituted with one or two radicals independently selected from the group consisting of an alkanoyl, halo, nitro, aralkyl, aryl, alkoxy, trifluoroalkyl, trifluoroalkoxy and an 20 amino group wherein the amino nitrogen is (i) unsubstituted or (ii) substituted with one or two groups independently selected from hydrido, alkyl, and an aralkyl group.

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2. The process according to claim 1 wherein said compound corresponds in structure to formula B-1

3. The process according to claim 1 wherein said compound corresponds in structure to formula B-2

$$\begin{array}{c} (CH_2)_{n} - Z \\ X \\ X \\ CH_2)_{m} (CH_2)_{p} \\ S(O)_{g} \\ \end{array}$$

- 4. The process according to claim 1 wherein the sum of m + n + p = 1 or 2.
 - 5. The process according to claim 1 wherein said compound or salt is administered a plurality of times.

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6. A process for treating a host mammal having a condition associated with pathological matrix metalloprotease (MMP) activity that comprises administering a metalloprotease inhibitor compound or a pharmaceutically acceptable salt thereof in an effective amount to a mammalian host having such a condition, said metalloprotease inhibitor inhibiting the activity of one or more of MMP-2, MMP-9 and MMP-13, while exhibiting substantially less inhibitory

activity against MMP-1, said compound corresponding in structure to formula B-3, below

$$\begin{array}{c|c} (CH_2)_{n} & Z \\ X & Q \\ X & Q \\ R^{20} & (CH_2)_{m} & (CH_2)_{p} \\ S(O)_{g} & B-3 \end{array}$$

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wherein

 R^{20} is $-NH-O-R^{14}$, where R^{14} is hydrido, a pharmaceutically acceptable cation or $C(W)R^{25}$ where W is O or S and R²⁵ is selected from the group consisting of an C₁-C₆-alkyl, aryl, C₁-C₆-alkoxy, heteroary1-C₁-C₆-alky1, C₃-C₈-cycloalky1-C₁-C₆-alky1, aryloxy, ar-C₁-C₆-alkoxy, ar-C₁-C₆-alkyl, heteroaryl and amino C_1 - C_6 -alkyl group wherein the amino C_1 - C_6 alkyl nitrogen is (i) unsubstituted or (ii) substituted with one or two substituents independently selected from the group consisting of an C_1-C_6 -alkyl, aryl, ar- C_1-C_6 -alkyl, C_3-C_8 cycloalkyl-C₁-C₆-alkyl, ar-C₁-C₆-alkoxycarbonyl, C₁- C_6 -alkoxycarbonyl, and C_1 - C_6 -alkanoyl radical, or (iii) wherein the amino C₁-C₆-alkyl nitrogen and two substituents attached thereto form a 5- to 8-membered heterocyclo or heteroaryl ring;

g is 2; m is zero, 1 or 2; n is zero, 1 or 2; p is zero, 1 or 2;

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the sum of m + n + p = 1, 2, 3 or 4;

(a) one of X, Y and Z is selected from the group consisting of C(O), NR^6 , O, S, S(O), S(O)₂ and $NS(O)_2R^7$, and the remaining two of X, Y and Z are CR^8R^9 , and $CR^{10}R^{11}$, or

- (b) X and Z or Z and Y together constitute a moiety that is selected from the group consisting of $NR^6C(0)$, $NR^6S(0)$, $NR^6S(0)_2$, NR^6S , NR^6O , SS, NR^6NR^6 and OC(0), with the remaining one of X, Y and Z being CR^8R^9 , or
- (c) n is zero and X, Y and Z together constitute a moiety selected from the group consisting of

wherein wavy lines are bonds to the atoms of the depicted ring;

R⁶ and R⁶ are independently selected from 5 the group consisting of hydrido, formyl, sulfonic- C_1 -C₆-alkyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl, hydroxycarbonyl-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl-C₁-C₆-alkyl, R⁸R⁹-aminocarbonyl-C₁-C₆-alkyl, C₁-C₆alkoxycarbonyl-C₁-C₆-alkylcarbonyl, hydroxycarbonyl-10 C_1-C_6 -alkylcarbonyl, C_1-C_6 -alkylcarbonyl- C_1-C_6 alkylcarbonyl, C₁-C₆-alkoxycarbonylcarbonyl, hydroxycarbonylcarbonyl, C1-C6-alkylcarbonylcarbonyl, R8R9-aminocarbonylcarbonyl, C1-C6-alkanoyl, aryl-C1- C_6 -alkyl, aroyl, bis(C_1 - C_6 -alkoxy- C_1 - C_6 -alkyl)- C_1 - C_6 -15 alkyl, C_1-C_6 -alkyl, C_1-C_6 -haloalkyl, C_1-C_6 perfluoroalkyl, C₁-C₆-trifluoromethylalkyl, C₁-C₆perfluoroalkoxy-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆alkyl, C3-C6-cycloalkyl, heteroarycarbonyl,

heterocyclocarbonyl, C_3-C_8 -heterocycloalkyl, C_3-C_8 -heterocycloalkylcarbonyl, aryl, C_5-C_6 -heterocyclo, C_5-C_6 -heteroaryl, C_3-C_8 -cycloalkyl- C_1-C_6 -alkyl, aryloxy- C_1-C_6 -alkyl, heteroaryloxy- C_1-C_6 -alkyl,

- heteroaryl-C₁-C₆-alkoxy-C₁-C₆-alkyl, heteroarylthio-C₁-C₆-alkyl, arylsulfonyl, C₁-C₆-alkylsulfonyl, C₅-C₆-heteroarylsulfonyl, carboxy-C₁-C₆-alkyl, C₁-C₄-alkoxycarbonyl-C₁-C₆-alkyl, aminocarbonyl, C₁-C₆-alkyl(R⁸N)iminocarbonyl, aryl(R⁸N)iminocarbonyl, C₅-
- 10 C₆-heterocyclo(R⁸N)iminocarbonyl, arylthio-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, arylthio-C₃-C₆-alkenyl, C₁-C₄-alkylthio-C₃-C₆-alkenyl, C₅-C₆-heteroaryl-C₁-C₆-alkyl, halo-C₁-C₆-alkanoyl, hydroxy-C₁-C₆-alkanoyl, thiol-C₁-C₆-alkanoyl, C₃-C₆-alkenyl,
- 15 $C_3-C_6-alkynyl$, $C_1-C_4-alkoxy-C_1-C_4-alkyl$, $C_1-C_5-alkoxycarbonyl$, aryloxycarbonyl, $NR^8R^9-(R^8)$ iminomethyl, $NR^8R^9-C_1-C_5-alkylcarbonyl$, hydroxy- $C_1-C_5-alkyl$, $R^8R^9-aminocarbonyl$, $R^8R^9-aminocarbonyl-C_1-C_6-alkylcarbonyl$, hydroxyaminocarbonyl, $R^8R^9-aminocarbonyl$, $R^8R^9-aminocarbonyl$
- amino-C₁-C₆-alkylsulfonyl and an R^8R^9 -amino-C₁-C₆-alkyl group;

 R^7 is selected from the group consisting of a arylalkyl, aryl, heteroaryl, heterocyclo, C_1 - C_6 -alkyl, C_3 - C_6 -alkynyl, C_3 - C_6 -alkenyl, C_1 - C_6 -carboxyalkyl and a C_1 - C_6 -hydroxyalkyl group;

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 ${\tt R}^{\tt 8}$ and ${\tt R}^{\tt 9}$ and ${\tt R}^{\tt 10}$ and ${\tt R}^{\tt 11}$ are independently selected from the group consisting of a hydrido, hydroxy, C₁-C₆-alkyl, C₁-C₆-alkanoyl, aroyl, aryl, ar-C₁-C₆-alkyl, heteroaryl, heteroar-C₁-C₆-alkyl, C₂-C₆-alkynyl, C₂-C₆-alkenyl, thiol-C₁-C₆-alkyl, C₁-C₆alkylthio-C₁-C₆-alkyl, cycloalkyl, cycloalkyl-C₁-C₆alkyl, heterocycloalkyl-C1-C6-alkyl, C1-C6-alkoxy-C1- C_6 -alkyl, aralkoxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy- C_1 - C_6 alkoxy-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, ${\tt hydroxycarbonyl-C_1-C_6-alkyl,\ hydroxycarbonylar-C_1-C_6-alkyl,\ hyd$ alkyl, aminocarbonyl-C₁-C₆-alkyl, aryloxy-C₁-C₆alkyl, heteroaryloxy- C_1 - C_6 -alkyl, arylthio- C_1 - C_6 alkyl, heteroarylthio-C₁-C₆-alkyl, the sulfoxide or sulfone of any said thio substituents, perfluoro-C1-C6-alkyl, trifluoromethyl-C1-C6-alkyl, halo-C1-C6alkyl, alkoxycarbonylamino-C1-C6-alkyl and an amino- C_1 - C_6 -alkyl group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii) substituted with one or two radicals independently selected from the group consisting of C_1 - C_6 -alkyl, ar- C_1 - C_6 -alkyl, cycloalkyl and C_1 - C_6 -alkanoyl, or wherein R^8 and R^9 or R^{10} and ${\tt R}^{11}$ and the carbon to which they are bonded form a carbonyl group, or wherein \mathbb{R}^8 and \mathbb{R}^9 or \mathbb{R}^{10} and \mathbb{R}^{11} , or \mathbb{R}^8 and \mathbb{R}^{10} together with the atoms to which they are bonded form a 5- to 8-membered carbocyclic ring, or a 5- to 8-membered heterocyclic or heteroaryl ring

containing one or two heteroatoms that are nitrogen,

oxygen, or sulfur, with the proviso that only one of \mathbb{R}^8 and \mathbb{R}^9 or \mathbb{R}^{10} and \mathbb{R}^{11} is hydroxy;

R¹² and R¹² are independently selected from the group consisting of a hydrido, C1-C6-alkyl, aryl, ar-C₁-C₆-alkyl, heteroaryl, heteroaralkyl, C₂-C₆-alkynyl, C₂-C₆-alkenyl, thiol-C₁-C₆-alkyl, cycloalkyl, cycloalkyl-C1-C6-alkyl, heterocycloalkyl- $C_1-C_6-alkyl$, $C_1-C_6-alkoxy-C_1-C_6-alkyl$, aryloxy- $C_1-C_6-alkyl$ alkyl, amino- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy- C_1 - C_6 -alkoxy-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, hydroxycarbonyl-C₁-C6-alkyl, hydroxycarbonylar-C1-C6-alkyl, aminocarbonyl-C₁-C₆-alkyl, aryloxy-C₁-C₆-alkyl, heteroaryloxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkylthio- C_1 - C_6 alkyl, arylthio-C₁-C₆-alkyl, heteroarylthio-C₁-C₆alkyl, the sulfoxide or sulfone of any said thio 15 substituents, perfluoro-C1-C6-alkyl, trifluoromethyl-C₁-C₆-alkyl, halo-C₁-C₆-alkyl, alkoxycarbonylamino- C_1-C_6 -alkyl and an amino- C_1-C_6 -alkyl group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii) substituted with one or two radicals independently 20 selected from the group consisting of C1-C6-alkyl, ar-C₁-C₆-alkyl, cycloalkyl and C₁-C₆-alkanoyl;

 $\rm R^{13}$ is selected from the group consisting of a hydrido, benzyl, phenyl, $\rm C_1-C_6-alkyl$, $\rm C_2-C_6-alkynyl$, $\rm C_2-C_6-alkenyl$ and a $\rm C_1-C_6-hydroxyalkyl$ group;

Q is a 5- to 7-membered heterocyclic ring containing one or two nitrogen atoms one of which is bonded the depicted phenyl group, and whose remaining

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members (A-R-E-Y) are bonded at the 4-position relative to said phenyl-bonded nitrogen atom when Q is a 6- or 7-membered ring and at the 3- or 4-position relative to that nitrogen when Q is a 5-membered ring;

 $\hspace{1.5cm} \hspace{1.5cm} \hspace{1$

- (1) $-CO(R^{19})$ or $-(R^{19})CO$ -, wherein R^{19} is a heterocycloalkyl, or a cycloalkyl group;
- (2) —CONH- or -HNCO-; and
- (3) -CO-;
- (4) $-SO_2-R^{19}- \text{ or } -R^{19}-SO_2-;$
- $(5) -SO_2 -;$
- (6) $-NH-SO_2-$ or $-SO_2-NH-$;
 - (7) -S-;
 - (8) -NH-CO-O- or -O-CO-NH-; or
 - (9) E is absent and Y is bonded directly to the Q ring; and

the moiety Y is absent or is selected from 20 the group consisting of a hydrido, alkyl, alkoxy, haloalkyl, aryl, aralkyl, cycloalkyl, heteroaryl, hydroxy, aryloxy, aralkoxy, heteroaryloxy, heteroaralkyl, perfluoroalkoxy, perfluoroalkylthio, trifluoromethylalkyl, alkenyl, heterocycloalkyl, 25 cycloalkyl, trifluoromethyl, alkoxycarbonyl, and a aminoalkyl group, wherein the aryl, heteroaryl, aralkyl or heterocycloalkyl group is (i) unsubstituted or (ii) substituted with one or two radicals independently selected from the group 30 consisting of an alkanoyl, halo, nitro, aralkyl, aryl, alkoxy, trifluoroalkyl, trifluoroalkoxy and an

amino group wherein the amino nitrogen is (i) unsubstituted or (ii) substituted with one or two groups independently selected from hydrido, alkyl, and an aralkyl group.

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7. The process according to claim 6 wherein said compound corresponds in structure to formula VIC

$$\begin{array}{c|c} (CH_2)_{\overline{n}} & Z \\ \hline \\ R^{20} & (CH_2)_{\overline{m}} & (CH_2)_{\overline{p}} \\ \hline \\ S(O)_g & VIC \end{array}$$

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- 8. The process according to claim 6 wherein the sum of m + n + p = 1.
- 9. The process according to claim 6

 15 wherein said compound corresponds in structure to formula IX

$$R^{20}$$
 SO_2
 DX

wherein Z is selected group the group consisting of O, S, NR^6 , SO, SO_2 , and NSO_2R^7 , and R^6 and R^7 are defined before.

10. The process according to claim 9 wherein Z is NR^6 .

- 11. The process according to claim 10 5 wherein Z is O.
 - 12. The process according to claim 6 wherein said compound corresponds in structure to formula VIII

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$$R^{\frac{(CH_2)_n-Z}{(CH_2)_p}} \bigvee_{S(O)_g} \bigvee_{VIII}$$

13. The process according to claim 6 wherein said compound corresponds in structure to formula X

$$R^{20} \longrightarrow SO_2 \longrightarrow X$$

wherein Z is selected group the group consisting of O, S, NR^6 , SO, SO_2 , and NSO_2R^7 , and R^6 and R^7 are defined before.

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- 15. The process according to claim 13 wherein Z is O.
- 16. The process according to claim 6
 5 wherein said compound or salt is administered a plurality of times.
- having a condition associated with pathological
 matrix metalloprotease (MMP) activity that comprises
 administering a metalloprotease inhibitor compound or
 a pharmaceutically acceptable salt thereof in an
 effective amount to a mammalian host having such a
 condition, said metalloprotease inhibitor inhibiting
 the activity of one or more of MMP-2, MMP-9 and MMP13, while exhibiting substantially less inhibitory
 activity against MMP-1, said compound corresponding
 in structure to formula VIC, below

$$\begin{array}{c|c} (CH_2)_n - Z \\ \times \\ (CH_2)_m (CH_2)_p \\ S(O)_g \end{array}$$

$$VIC$$

wherein

 R^{20} is $-NH-O-R^{14}$, where R^{14} is hydrido, a pharmaceutically acceptable cation or $C(W)R^{25}$ where W^{25} is 0 or S and R^{25} is selected from the group consisting of an C_1-C_6 -alkyl, aryl, C_1-C_6 -alkoxy, heteroaryl- C_1-C_6 -alkyl, C_3-C_8 -cycloalkyl- C_1-C_6 -alkyl,

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aryloxy, $ar-C_1-C_6-alkoxy$, $ar-C_1-C_6-alkyl$, heteroaryl and amino $C_1-C_6-alkyl$ group wherein the amino $C_1-C_6-alkyl$ nitrogen is (i) unsubstituted or (ii) substituted with one or two substituents independently selected from the group consisting of an $C_1-C_6-alkyl$, aryl, $ar-C_1-C_6-alkyl$, $C_3-C_8-cycloalkyl-C_1-C_6-alkyl$, $ar-C_1-C_6-alkoxycarbonyl$, $C_1-C_6-alkoxycarbonyl$, and $C_1-C_6-alkoxycarbonyl$ radical, or (iii) wherein the amino $C_1-C_6-alkyl$ nitrogen and two substituents attached thereto form a 5- to 8-membered heterocyclo or heteroaryl ring;

g is 2;

m is zero, 1 or 2;

n is zero, 1 or 2;

p is zero, 1 or 2;

the sum of m + n + p = 1, 2, 3 or 4;

- (a) one of X, Y and Z is selected from the group consisting of C(0), NR^6 , O, S, S(0), $S(0)_2$ and $NS(0)_2R^7$, and the remaining two of X, Y and Z are
- 20 CR^8R^9 , and $CR^{10}R^{11}$, or
 - (b) X and Z or Z and Y together constitute a moiety that is selected from the group consisting of $NR^6C(0)$, $NR^6S(0)$, $NR^6S(0)_2$, NR^6S , NR^6O , SS, NR^6NR^6 and OC(0), with the remaining one of X, Y and Z being CR^8R^9 , or
 - (c) n is zero and X, Y and Z together constitute a moiety selected from the group consisting of

$$R^{6}$$
 R^{6}
 R^{6

wherein wavy lines are bonds to the atoms of the depicted ring;

 ${
m R}^6$ and ${
m R}^6$ ' are independently selected from the group consisting of hydrido, formyl, sulfonic-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl,

hydroxycarbonyl- C_1 - C_6 -alkyl, C_1 - C_6 -alkylcarbonyl- C_1 - C_6 -alkyl, R^8R^9 -aminocarbonyl- C_1 - C_6 -alkyl, C_1 - C_6 -

 $\label{eq:carbonyl-C1-C6-alkylcarbonyl-c1-C6-alkylcarbonyl-C1-C6-alkylcarbonyl-C1-C6-alkylcarbonyl-C1-C6-alkylcarbonyl, C1-C6-alkoxycarbonylcarbonyl, bydroxycarbonylcarbonyl, C1-C6-alkylcarbonylcarbonyl, C1-C6-alkylcarbonylcarbonyl, C1-C6-alkylcarbonylcarbonyl, C1-C6-alkylcarbonylcarbonyl, C1-C6-alkylcarbonylcarbonyl,$

- $\begin{array}{lll} & R^8R^9-aminocarbonylcarbonyl, & C_1-C_6-alkanoyl, & aryl-C_1-C_6-alkyl, & aroyl, & bis(C_1-C_6-alkoxy-C_1-C_6-alkyl)-C_1-C_6-alkyl, & C_1-C_6-alkyl, & C_1-C_6-alkoxy-C_1-C_6-alkyl, & C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkyl, & C_1-C_6-alkoxy-C_1-C_6-alkyl, & C_1-C_6-alkoxy-C_1-C_6-alkyl, & C_1-C_6-alkoxy-C_1-C_6-alkyl, & C_1-C_6-alkyl, & C_$
- alkyl, C₃-C₆-cycloalkyl, heteroarycarbonyl,
 heterocyclocarbonyl, C₃-C₈-heterocycloalkyl, C₃-C₈heterocycloalkylcarbonyl, aryl, C₅-C₆-heterocyclo,
 C₅-C₆-heteroaryl, C₃-C₈-cycloalkyl-C₁-C₆-alkyl,
 aryloxy-C₁-C₆-alkyl, heteroaryloxy-C₁-C₆-alkyl,
- heteroaryl-C₁-C₆-alkoxy-C₁-C₆-alkyl, heteroarylthio-C₁-C₆-alkyl, arylsulfonyl, C₁-C₆-alkylsulfonyl, C₅-C₆-heteroarylsulfonyl, carboxy-C₁-C₆-alkyl, C₁-C₄-alkoxycarbonyl-C₁-C₆-alkyl, aminocarbonyl, C₁-C₆-alkyl(R⁸N)iminocarbonyl, aryl(R⁸N)iminocarbonyl, C₅-
- C6-heterocyclo(R⁸N)iminocarbonyl, arylthio-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, arylthio-C₃-C₆-alkenyl, C₁-C₄-alkylthio-C₃-C₆-alkenyl, C₅-C₆-heteroaryl-C₁-C₆-alkyl, halo-C₁-C₆-alkanoyl, hydroxy-C₁-C₆-alkanoyl, thiol-C₁-C₆-alkanoyl, C₃-C₆-alkenyl,
- 25 C_3 - C_6 -alkynyl, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_1 - C_5 -alkoxycarbonyl, aryloxycarbonyl, NR^8R^9 - (R^8) iminomethyl, NR^8R^9 - C_1 - C_5 -alkylcarbonyl, hydroxy-

 C_1 - C_5 -alkyl, R^8R^9 -aminocarbonyl, R^8R^9 -aminocarbonyl- C_1 - C_6 -alkylcarbonyl, hydroxyaminocarbonyl, R^8R^9 -aminosulfonyl, R^8R^9 -aminosulfon- C_1 - C_6 -alkyl, R^8R^9 -amino- C_1 - C_6 -alkylsulfonyl and an R^8R^9 -amino- C_1 - C_6 -alkyl group;

 R^7 is selected from the group consisting of a arylalkyl, aryl, heteroaryl, heterocyclo, C_1 - C_6 -alkyl, C_3 - C_6 -alkynyl, C_3 - C_6 -alkenyl, C_1 - C_6 -carboxyalkyl and a C_1 - C_6 -hydroxyalkyl group;

 R^8 and R^9 and R^{10} and R^{11} are independently 10 selected from the group consisting of a hydrido, hydroxy, C₁-C₆-alkyl, C₁-C₆-alkanoyl, aroyl, aryl, ar-C₁-C₆-alkyl, heteroaryl, heteroar-C₁-C₆-alkyl, C₂-C₆-alkynyl, C₂-C₆-alkenyl, thiol-C₁-C₆-alkyl, C₁-C₆alkylthio-C₁-C₆-alkyl, cycloalkyl, cycloalkyl-C₁-C₆-15 alkyl, heterocycloalkyl-C1-C6-alkyl, C1-C6-alkoxy-C1- C_6 -alkyl, aralkoxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy- C_1 - C_6 alkoxy-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, hydroxycarbonyl-C₁-C₆-alkyl, hydroxycarbonylar-C₁-C₆alkyl, aminocarbonyl-C₁-C₆-alkyl, aryloxy-C₁-C₆-20 alkyl, heteroaryloxy-C₁-C₆-alkyl, arylthio-C₁-C₆alkyl, heteroarylthio-C₁-C₆-alkyl, the sulfoxide or sulfone of any said thio substituents, perfluoro- C_1 - C_6 -alkyl, trifluoromethyl- C_1 - C_6 -alkyl, halo- C_1 - C_6 alkyl, alkoxycarbonylamino-C1-C6-alkyl and an amino-25 C₁-C₆-alkyl group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii) substituted with one or two radicals independently selected from the group consisting of C₁-C₆-alkyl, ar-C₁-C₆-alkyl, cycloalkyl and C₁-C₆-alkanoyl, or wherein R⁸ and R⁹ or R¹⁰ and R¹¹ and the carbon to which they are bonded form a carbonyl group, or wherein R⁸ and R⁹ or R¹⁰ and R¹¹, or R⁸ and R¹⁰ together with the atoms to which they are bonded form a 5- to 8-membered carbocyclic ring, or a 5- to 8-membered heterocyclic or heteroaryl ring containing one or two heteroatoms that are nitrogen, oxygen, or sulfur, with the proviso that only one of R⁸ and R⁹ or R¹⁰ and R¹¹ is hydroxy;

 ${\tt R}^{12}$ and ${\tt R}^{12}$ are independently selected from the group consisting of a hydrido, C_1 - C_6 -alkyl, aryl, ar- C_1 - C_6 -alkyl, heteroaryl, heteroaralkyl, C_2 - C_6 -alkynyl, C_2 - C_6 -alkenyl, thiol- C_1 - C_6 -alkyl, cycloalkyl, cycloalkyl- C_1 - C_6 -alkyl, heterocycloalkyl-15 $C_1-C_6-alkyl$, $C_1-C_6-alkoxy-C_1-C_6-alkyl$, aryloxy- $C_1-C_6-alkyl$ alkyl, amino- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy- C_1 - C_6 -alkoxy- C_1-C_6 -alkyl, hydroxy- C_1-C_6 -alkyl, hydroxycarbonyl- C_1 -C6-alkyl, hydroxycarbonylar-C1-C6-alkyl, 20 aminocarbonyl-C₁-C₆-alkyl, aryloxy-C₁-C₆-alkyl, heteroaryloxy-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆alkyl, arylthio- C_1 - C_6 -alkyl, heteroarylthio- C_1 - C_6 alkyl, the sulfoxide or sulfone of any said thio substituents, perfluoro-C₁-C₆-alkyl, trifluoromethyl- $C_1-C_6-alkyl$, halo- $C_1-C_6-alkyl$, alkoxycarbonylamino-25 C_1 - C_6 -alkyl and an amino- C_1 - C_6 -alkyl group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii)

substituted with one or two radicals independently selected from the group consisting of C_1 - C_6 -alkyl, ar- C_1 - C_6 -alkyl, cycloalkyl and C_1 - C_6 -alkanoyl;

 R^{13} is selected from the group consisting of a hydrido, benzyl, phenyl, C_1 - C_6 -alkyl, C_2 - C_6 -alkynyl, C_2 - C_6 -alkenyl and a C_1 - C_6 -hydroxyalkyl group;

-E-Y is a substituent of whose members, the moiety E is selected from the group consisting of

10 (1) $-CO(R^{19})$ or $-(R^{19})CO$, wherein R^{19} is a heterocycloalkyl, or a cycloalkyl group;

- (2) -CONH- or -HNCO-; and
- (3) -CO-;

15 (4) $-SO_2-R^{19}$ or $-R^{19}-SO_2$;

- $(5) -SO_2 -;$
- (6) $-NH-SO_2- or -SO_2-NH-;$
- (7) -S-;
- (8) -NH-CO-O- or -O-CO-NH-; or

20 (9) E is absent and Y is bonded directly to the depicted Q ring; and

the moiety Y is absent or is selected from the group consisting of a hydrido, alkyl, alkoxy, haloalkyl, aryl, aralkyl, cycloalkyl, heteroaryl,

- hydroxy, aryloxy, aralkoxy, heteroaryloxy, heteroaralkyl, perfluoroalkoxy, perfluoroalkylthio, trifluoromethylalkyl, alkenyl, heterocycloalkyl, cycloalkyl, trifluoromethyl, alkoxycarbonyl, and a aminoalkyl group, wherein the aryl, heteroaryl,
- 30 aralkyl or heterocycloalkyl group is (i) unsubstituted or (ii) substituted with one or two

radicals independently selected from the group consisting of an alkanoyl, halo, nitro, aralkyl, aryl, alkoxy, trifluoroalkyl, trifluoroalkoxy and an amino group wherein the amino nitrogen is (i) unsubstituted or (ii) substituted with one or two groups independently selected from hydrido, alkyl, and an aralkyl group.

- 18. The process according to claim 17 wherein Z is O, S or NR^6 .
 - 19. The process according to claim 17 wherein m = zero, n = 1, p = 1, and Z is NR^6 .
- 15 20. The process according to claim 17 wherein m = zero, n = 1, p = 1, and Z is O.
- 21. The process according to claim 17
 wherein said compound corresponds in structure to
 20 formula VIC-1

$$\begin{array}{c} (CH_2)_{n} - Z \\ X \\ X \\ CH_2)_{p} (CH_2)_{p} \\ S(O)_{g} \\ \end{array}$$

$$VIC-1$$

22. The process according to claim 17
25 wherein said compound corresponds in structure to formula VIC-2

$$\begin{array}{c|c} (CH_2)_{\overline{n}} - Z \\ X \\ R^{20} (CH_2)_{\overline{p}} (CH_2)_{\overline{p}} \\ S(O)_g \\ \end{array}$$

$$VIC-2$$

23. The process according to claim 17 wherein said compound corresponds in structure to formula IX-1

24. The process according to claim 13 wherein said compound corresponds in structure to formula IX-2

25. A compound corresponding in structure to formula B, below, or a pharmaceutically acceptable salt thereof:

wherein

substituent R^{20} is (a) $-0-R^{21}$, where R^{21} is selected from the group consisting of a hydrido, C_1 -5 C6-alkyl, aryl, ar-C1-C6-alkyl group and a pharmaceutically acceptable cation, (b) -NH-O-R²² wherein R²² is a selectively removable protecting group, (c) $-NH-O-R^{14}$, where R^{14} is hydrido, a pharmaceutically acceptable cation or $C(W)R^{25}$ where W 10 is O or S and R^{25} is selected from the group consisting of an C₁-C₆-alkyl, aryl, C₁-C₆-alkoxy, heteroaryl-C₁-C₆-alkyl, C₃-C₈-cycloalkyl-C₁-C₆-alkyl, aryloxy, ar-C₁-C₆-alkoxy, ar-C₁-C₆-alkyl, heteroaryl and amino C_1 - C_6 -alkyl group wherein the amino C_1 - C_6 -15 alkyl nitrogen is (i) unsubstituted or (ii) substituted with one or two substituents independently selected from the group consisting of an C_1-C_6 -alkyl, aryl, ar- C_1-C_6 -alkyl, C_3-C_8 cycloalkyl- C_1 - C_6 -alkyl, ar- C_1 - C_6 -alkoxycarbonyl, C_1 -20 C_6 -alkoxycarbonyl, and C_1 - C_6 -alkanoyl radical, or (iii) wherein the amino C_1-C_6 -alkyl nitrogen and two substituents attached thereto form a 5- to 8-membered heterocyclo or heteroaryl ring, or (d) $-NR^{26}R^{27}$, where R^{26} and R^{27} are independently selected from the 25

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group consisting of a hydrido, C_1 - C_6 -alkyl, amino C_1 - C_6 -alkyl, hydroxy C_1 - C_6 -alkyl, aryl, ar- C_1 - C_6 -alkyl group, or R^{26} and R^{27} together with the depicted nitrogen atom form a 5- to 8-membered ring containing zero or one additional heteroatom that is oxygen, nitrogen or sulfur;

g is zero, 1 or 2;

m is zero, 1 or 2;

n is zero, 1 or 2;

10 p is zero, 1 or 2;

the sum of m + n + p = 1, 2, 3 or 4;

- (a) one of X, Y and Z is selected from the group consisting of C(O), NR^6 , O, S, S(O), S(O)₂ and $NS(O)_2R^7$, and the remaining two of X, Y and Z are CR^8R^9 , and $CR^{10}R^{11}$, or
- (b) X and Z or Z and Y together constitute a moiety that is selected from the group consisting of $NR^6C(0)$, $NR^6S(0)$, $NR^6S(0)_2$, NR^6S , NR^6O , SS, NR^6NR^6 and OC(0), with the remaining one of X, Y and Z being CR^8R^9 , or
 - (c) n is zero and X, Y and Z together constitute a moiety selected from the group consisting of

wherein wavy lines are bonds to the atoms of the depicted ring;

 ${
m R}^6$ and ${
m R}^6$ are independently selected from the group consisting of hydrido, formyl, sulfonic-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl,

hydroxycarbonyl- C_1 - C_6 -alkyl, C_1 - C_6 -alkylcarbonyl- C_1 - C_6 -alkyl, R^8R^9 -aminocarbonyl- C_1 - C_6 -alkyl, C_1 - C_6 -

alkoxycarbonyl-C₁-C₆-alkylcarbonyl, hydroxycarbonyl-C₁-C₆-alkylcarbonyl, C₁-C₆-alkylcarbonyl-C₁-C₆alkylcarbonyl, C₁-C₆-alkoxycarbonylcarbonyl, hydroxycarbonylcarbonyl, C₁-C₆-alkylcarbonylcarbonyl, R^8R^9 -aminocarbonylcarbonyl, C_1 - C_6 -alkanoyl, aryl- C_1 - C_6 -alkyl, aroyl, bis(C_1 - C_6 -alkoxy- C_1 - C_6 -alkyl)- C_1 - C_6 alkyl, C_1-C_6 -alkyl, C_1-C_6 -haloalkyl, C_1-C_6 perfluoroalkyl, C₁-C₆-trifluoromethylalkyl, C₁-C₆- $\tt perfluoroalkoxy-C_1-C_6-alkyl,\ C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkoxy-C_1-C_6-alkyl)$ alkyl, C3-C6-cycloalkyl, heteroarycarbonyl, 10 heterocyclocarbonyl, C3-C8-heterocycloalkyl, C3-C8heterocycloalkylcarbonyl, aryl, C5-C6-heterocyclo, C5-C6-heteroaryl, C3-C8-cycloalkyl-C1-C6-alkyl, aryloxy-C₁-C₆-alkyl, heteroaryloxy-C₁-C₆-alkyl, heteroaryl-C₁-C₆-alkoxy-C₁-C₆-alkyl, heteroarylthio-15 C₁-C₆-alkyl, arylsulfonyl, C₁-C₆-alkylsulfonyl, C₅-C6-heteroarylsulfonyl, carboxy-C1-C6-alkyl, C1-C4alkoxycarbonyl-C₁-C₆-alkyl, aminocarbonyl, C₁-C₆alkyl(R8N)iminocarbonyl, aryl(R8N)iminocarbonyl, C5-C6-heterocyclo(R8N)iminocarbonyl, arylthio-C1-C6-20 alkyl, C_1 - C_6 -alkylthio- C_1 - C_6 -alkyl, arylthio- C_3 - C_6 alkenyl, C₁-C₄-alkylthio-C₃-C₆-alkenyl, C₅-C₆ $heteroaryl-C_1-C_6-alkyl$, $halo-C_1-C_6-alkanoyl$, hydroxy- C_1-C_6 -alkanoyl, thiol- C_1-C_6 -alkanoyl, C_3-C_6 -alkenyl, $C_3-C_6-alkynyl$, $C_1-C_4-alkoxy-C_1-C_4-alkyl$, $C_1-C_5-alkyl$ 25 alkoxycarbonyl, aryloxycarbonyl, NR⁸R⁹-

(R⁸)iminomethyl, NR⁸R⁹-C₁-C₅-alkylcarbonyl, hydroxy-

 C_1 - C_5 -alkyl, R^8R^9 -aminocarbonyl, R^8R^9 -aminocarbonyl- C_1 - C_6 -alkylcarbonyl, hydroxyaminocarbonyl, R^8R^9 -aminosulfonyl, R^8R^9 -aminosulfon- C_1 - C_6 -alkyl, R^8R^9 -amino- C_1 - C_6 -alkylsulfonyl and an R^8R^9 -amino- C_1 - C_6 -alkyl group;

 $\rm R^7$ is selected from the group consisting of a arylalkyl, aryl, heteroaryl, heterocyclo, $\rm C_1$ - $\rm C_6$ -alkyl, $\rm C_3$ - $\rm C_6$ -alkyl, $\rm C_3$ - $\rm C_6$ -alkelyl, $\rm C_1$ - $\rm C_6$ -carboxyalkyl and a $\rm C_1$ - $\rm C_6$ -hydroxyalkyl group;

 ${\tt R}^{8}$ and ${\tt R}^{9}$ and ${\tt R}^{10}$ and ${\tt R}^{11}$ are independently 10 selected from the group consisting of a hydrido, hydroxy, C₁-C₆-alkyl, C₁-C₆-alkanoyl, aroyl, aryl, ar-C₁-C₆-alkyl, heteroaryl, heteroar-C₁-C₆-alkyl, C₂- C_6 -alkynyl, C_2 - C_6 -alkenyl, thiol- C_1 - C_6 -alkyl, C_1 - C_6 alkylthio- C_1 - C_6 -alkyl, cycloalkyl, cycloalkyl- C_1 - C_6 -15 alkyl, heterocycloalkyl- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy- C_1 - C_6 -alkyl, aralkoxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy- C_1 - C_6 alkoxy-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, ${\tt hydroxycarbonyl-C_1-C_6-alkyl,\ hydroxycarbonylar-C_1-C_6-alkyl,\ hyd$ alkyl, aminocarbonyl-C₁-C₆-alkyl, aryloxy-C₁-C₆-20 alkyl, heteroaryloxy- C_1 - C_6 -alkyl, arylthio- C_1 - C_6 alkyl, heteroarylthio- C_1 - C_6 -alkyl, the sulfoxide or sulfone of any said thio substituents, perfluoro- C_1 - C_6 -alkyl, trifluoromethyl- C_1 - C_6 -alkyl, halo- C_1 - C_6 alkyl, alkoxycarbonylamino- C_1 - C_6 -alkyl and an amino-25 C_1 - C_6 -alkyl group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii) substituted with one or two

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radicals independently selected from the group consisting of C_1 - C_6 -alkyl, ar- C_1 - C_6 -alkyl, cycloalkyl and C_1 - C_6 -alkanoyl, or wherein R^8 and R^9 or R^{10} and R^{11} and the carbon to which they are bonded form a carbonyl group, or wherein R^8 and R^9 or R^{10} and R^{11} , or R^8 and R^{10} together with the atoms to which they are bonded form a 5- to 8-membered carbocyclic ring, or a 5- to 8-membered heterocyclic or heteroaryl ring containing one or two heteroatoms that are nitrogen, oxygen, or sulfur, with the proviso that only one of R^8 and R^9 or R^{10} and R^{11} is hydroxy;

 ${\bf R}^{12}$ and ${\bf R}^{12}$ are independently selected from the group consisting of a hydrido, C_1-C_6 -alkyl, aryl, ar-C₁-C₆-alkyl, heteroaryl, heteroaralkyl, C₂- C_6 -alkynyl, C_2 - C_6 -alkenyl, thiol- C_1 - C_6 -alkyl, cycloalkyl, cycloalkyl-C1-C6-alkyl, heterocycloalkyl- $C_1-C_6-alkyl$, $C_1-C_6-alkoxy-C_1-C_6-alkyl$, $aryloxy-C_1-C_6-alkyl$ alkyl, amino- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy- C_1 - C_6 -alkoxy- $C_1-C_6-alkyl$, hydroxy- $C_1-C_6-alkyl$, hydroxycarbonyl- $C_1-alkyl$ C₆-alkyl, hydroxycarbonylar-C₁-C₆-alkyl, aminocarbonyl-C₁-C₆-alkyl, aryloxy-C₁-C₆-alkyl, heteroaryloxy-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆alkyl, arylthio-C₁-C₆-alkyl, heteroarylthio-C₁-C₆alkyl, the sulfoxide or sulfone of any said thio substituents, perfluoro-C₁-C₆-alkyl, trifluoromethyl-C₁-C₆-alkyl, halo-C₁-C₆-alkyl, alkoxycarbonylamino- $C_1-C_6-alkyl$ and an amino- $C_1-C_6-alkyl$ group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii)

substituted with one or two radicals independently selected from the group consisting of C_1 - C_6 -alkyl, ar- C_1 - C_6 -alkyl, cycloalkyl and C_1 - C_6 -alkanoyl;

 $\rm R^{13}$ is selected from the group consisting of a hydrido, benzyl, phenyl, $\rm C_1$ - $\rm C_6$ -alkyl, $\rm C_2$ - $\rm C_6$ -alkynyl, $\rm C_2$ - $\rm C_6$ -alkenyl and a $\rm C_1$ - $\rm C_6$ -hydroxyalkyl group; and

-Q-A-R-E-Y is a substituent in which the moiety Q is a 5- to 7-membered heterocyclic ring

10 containing one or two nitrogen atoms one of which is bonded the depicted phenyl group, and whose remaining members (A-R-E-Y) are bonded at the 4-position relative to said phenyl-bonded nitrogen atom when Q is a 6- or 7-membered ring and at the 3- or 4
15 position relative to that nitrogen when Q is a 5- membered ring;

A is selected from the group consisting of

- (1) -0-;
- (2) -S-;
- 20 (3) -NR¹⁷-;
 - (4) $-CO-N(R^{17})$ or $-N(R^{17})-CO-$, wherein R^{17} is hydrogen, C_1-C_4 -alkyl, or phenyl;
 - (5) —CO-O- or —O-CO-;
 - (6) -O-CO-O-;
- 25 (7) —HC=CH-;
 - (8) -NH-CO-NH-;
 - (9) —C≡C-;
 - (10) -NH-CO-O- or -O-CO-NH-;
 - (11) -N=N-;
- 30 (12) -NH-NH-; and

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- (13) $-CS-N(R^{18})-$ or $-N(R^{18})-CS-$, wherein R^{18} is hydrogen C_1-C_4 -alkyl, or phenyl; or
- (14) A is absent and Q is bonded directly to R;

R is a moiety selected from the group consisting of alkyl, alkoxyalkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, heteroaralkyl, heterocycloalkylalkyl, cycloalkylalkyl,

- 10 cycloalkoxyalkyl, heterocycloalkoxyalkyl, aryloxyalkyl, heteroaryloxyalkyl, arylthioalkyl, heteroarylthioalkyl, cycloalkylthioalkyl, and a heterocycloalkylthioalkyl group wherein the aryl or heteroaryl or cycloalkyl or heterocycloalkyl
- substituent is (i) unsubstituted or (ii) substituted with one or two radicals selected from the group consisting of a halo, alkyl, perfluoroalkyl, perfluoroalkoxy, perfluoroalkylthio, trifluoromethylalkyl, amino, alkoxycarbonylalkyl,
- alkoxy, C₁-C₂-alkylene-dioxy, hydroxycarbonylalkyl, hydroxycarbonylalkylamino, nitro, hydroxy, hydroxyalkyl, alkanoylamino, and a alkoxycarbonyl group, and R is other than alkyl or alkoxyalkyl when A is -O- or -S-;
- the moiety E is selected from the group consisting of
 - (1) $-CO(R^{19})$ or $-(R^{19})CO$ -, wherein R^{19} is a heterocycloalkyl, or a cycloalkyl group;
 - (2) —CONH- or -HNCO-; and
 - (3) -CO-;

- (4) $-SO_2-R^{19}$ or $-R^{19}-SO_2$;
- $(5) -SO_2 -;$
- (6) $-NH-SO_2- \text{ or } -SO_2-NH-;$
- (7) -S-;
- (8) -NH-CO-O- or -O-CO-NH-; or
 - (9) E is absent and R is bonded directly to Y; ; and

the moiety Y is absent or is selected from the group consisting of a hydrido, alkyl, alkoxy, haloalkyl, aryl, aralkyl, cycloalkyl, heteroaryl, 10 hydroxy, aryloxy, aralkoxy, heteroaryloxy, heteroaralkyl, perfluoroalkoxy, perfluoroalkylthio, trifluoromethylalkyl, alkenyl, heterocycloalkyl, cycloalkyl, trifluoromethyl, alkoxycarbonyl, and a aminoalkyl group, wherein the aryl, heteroaryl, 15 aralkyl or heterocycloalkyl group is (i) unsubstituted or (ii) substituted with one or two radicals independently selected from the group consisting of an alkanoyl, halo, nitro, aralkyl, aryl, alkoxy, trifluoroalkyl, trifluoroalkoxy and an 20 amino group wherein the amino nitrogen is (i) unsubstituted or (ii) substituted with one or two groups independently selected from hydrido, alkyl, and an aralkyl group.

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- 26. The compound or salt according to claim 25 wherein A is -O- or -S-.
- 27. The compound or salt according to 30 claim 25 wherein A is absent.

- 28. The compound or salt according to claim 25 wherein R is an aryl, heteroaryl, cycloalkyl or heterocycloalkyl group.
- 5 29. The compound or salt according to claim 25 wherein \mathbb{R}^{14} is hydrido.
- 30. The compound or salt according to claim 25 wherein W of the $C(W)R^{15}$ is 0 and R^{15} is a $C_1-C_6-alkyl$, aryl, $C_1-C_6-alkoxy$, heteroaryl- $C_1-C_6-alkyl$, $C_3-C_8-cycloalkyl-C_1-C_6-alkyl$, or aryloxy group.
- 31. The compound or salt according to claim 25 wherein the sum of m + n + p = 1 or 2.
 - 32. The compound or salt according to claim 25 wherein the sum of m + n + p = 1.
- 20 33. The compound or salt according to claim 25 wherein the moiety Q is a 5-membered ring.
 - 34. The compound or salt according to claim 25 wherein the moiety Q is a 7-membered ring.
 - 35. The compound or salt according to claim 25 wherein the moiety Q is a 6-membered ring.
- 36. The compound or salt according to claim 35 wherein said compound corresponds in structure to formula B-A

HONH
$$S(0)_2$$
 $B-A$ $B-A$

wherein Z is selected group the group consisting of O, S, NR^6 , SO, SO_2 , and NSO_2R^7 , and R^6 and R^7 are defined before.

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- 37. The compound or salt according to claim 36 wherein Z is NR^6 .
- 38. The compound or salt according to 10 claim 36 wherein Z is O.
 - 39. The compound or salt according to claim 25 wherein the moiety Q contains two nitrogen atoms in the ring.

- 40. The compound or salt according to claim 25 wherein R^{20} is $-NH-O-R^{22}$.
- 41. The compound or salt according to claim 25 wherein R^{20} is $-NH-O-R^{14}$.
 - 42. A compound corresponding in structure to formula B-A, below, or a pharmaceutically acceptable salt thereof

HONH
$$S(O)_2$$
 $B-A$ $B-A$

wherein

Z is selected from the group consisting of C(0), NR^6 , O, S, S(0), $S(0)_2$ and $NS(0)_2R^7$;

R⁶ is selected from the group consisting of hydrido, formyl, sulfonic-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkyl, hydroxycarbonyl-C₁-C₆-alkyl, hydroxycarbonyl-C₁-C₆-alkyl, C₁-C₆-alkylcarbonyl-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonyl-C₁-C₆-alkylcarbonyl, hydroxycarbonyl-C₁-C₆-alkylcarbonyl, C₁-C₆-alkylcarbonyl-C₁-C₆-alkylcarbonyl, hydroxycarbonylcarbonyl, hydroxycarbonylcarbonyl, C₁-C₆-alkoxycarbonylcarbonyl, hydroxycarbonylcarbonyl, C₁-C₆-alkylcarbonylcarbonyl, hydroxycarbonylcarbonyl, C₁-C₆-alkylcarbonylcarbonyl, aryl-C₁-C₆-alkylcarbonylcarbonyl, his (C₁-C₆-alkoxy-C₁-C₆-alkyl)-C₁-C₆-alkyl)-C₁-C₆-alkyl-C₁-C₆-alkyl)-C₁-C₆-alkyl-C₁-C₆-alkyl)-C₁-C₆-alkyl-C₁-C₆-alkyl)-C₁-C₆-alkyl-C₁-C₆-a

C₆-alkyl, aroyl, bis(C₁-C₆-alkoxy-C₁-C₆-alkyl)-C₁-C₆-alkyl, C₁-C₆-alkyl, C₁-C₆-alkyl, C₁-C₆-alkyl, C₁-C₆-baloalkyl, C₁-C₆-perfluoroalkyl, C₁-C₆-trifluoromethylalkyl, C₁-C₆-perfluoroalkoxy-C₁-C₆-alkyl, C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-

alkyl, C₃-C₆-cycloalkyl, heteroarycarbonyl,
heterocyclocarbonyl, C₃-C₈-heterocycloalkyl, C₃-C₈heterocycloalkylcarbonyl, aryl, C₅-C₆-heterocyclo,
C₅-C₆-heteroaryl, C₃-C₈-cycloalkyl-C₁-C₆-alkyl,
aryloxy-C₁-C₆-alkyl, heteroaryloxy-C₁-C₆-alkyl,

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alkyl group;

 $heteroaryl-C_1-C_6-alkoxy-C_1-C_6-alkyl$, heteroarylthio-alkyl $C_1-C_6-alkyl$, arylsulfonyl, $C_1-C_6-alkylsulfonyl$, $C_5-alkylsulfonyl$ C6-heteroarylsulfonyl, carboxy-C1-C6-alkyl, C1-C4alkoxycarbonyl- C_1 - C_6 -alkyl, aminocarbonyl, C_1 - C_6 alkyl(R^8N)iminocarbonyl, aryl(R^8N)iminocarbonyl, C_5 -C₆-heterocyclo(R⁸N)iminocarbonyl, arylthio-C₁-C₆alkyl, C_1 - C_6 -alkylthio- C_1 - C_6 -alkyl, arylthio- C_3 - C_6 alkenyl, C₁-C₄-alkylthio-C₃-C₆-alkenyl, C₅-C₆ $heteroaryl-C_1-C_6-alkyl$, $halo-C_1-C_6-alkanoyl$, hydroxy-alkanoyl C_1-C_6 -alkanoyl, thiol- C_1-C_6 -alkanoyl, C_3-C_6 -alkenyl, $C_3-C_6-alkynyl$, $C_1-C_4-alkoxy-C_1-C_4-alkyl$, $C_1-C_5-alkyl$ alkoxycarbonyl, aryloxycarbonyl, NR⁸R⁹-(R⁸)iminomethyl, NR⁸R⁹-C₁-C₅-alkylcarbonyl, hydroxy-C₁-C₅-alkyl, R⁸R⁹-aminocarbonyl, R⁸R⁹-aminocarbonyl-C₁-C₆-alkylcarbonyl, hydroxyaminocarbonyl, R⁸R⁹aminosulfonyl, R8R9-aminosulfon-C1-C6-alkyl, R8R9amino- C_1 - C_6 -alkylsulfonyl and an R^8R^9 -amino- C_1 - C_6 -

 $m R^7$ is selected from the group consisting of a arylalkyl, aryl, heteroaryl, heterocyclo, $\rm C_1$ - $\rm C_6$ -alkyl, $\rm C_3$ - $\rm C_6$ -alkyl, $\rm C_3$ - $\rm C_6$ -alkelyl, $\rm C_1$ - $\rm C_6$ -carboxyalkyl and a $\rm C_1$ - $\rm C_6$ -hydroxyalkyl group;

R⁸ and R⁹ are independently selected from the group consisting of a hydrido, hydroxy, C₁-C₆-25 alkyl, C₁-C₆-alkanoyl, aroyl, aryl, ar-C₁-C₆-alkyl, heteroar-C₁-C₆-alkyl, C₂-C₆-alkynyl, C₂-

C₆-alkenyl, thiol-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆alkyl, cycloalkyl, cycloalkyl- C_1 - C_6 -alkyl, heterocycloalkyl-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆alkyl, aralkoxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy- C_1 - C_6 alkoxy-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, 5 ${\tt hydroxycarbonyl-C_1-C_6-alkyl,\ hydroxycarbonylar-C_1-C_6-alkyl,\ hyd$ alkyl, aminocarbonyl-C₁-C₆-alkyl, aryloxy-C₁-C₆alkyl, heteroaryloxy-C₁-C₆-alkyl, arylthio-C₁-C₆alkyl, heteroarylthio-C₁-C₆-alkyl, the sulfoxide or sulfone of any said thio substituents, perfluoro- C_1 -10 C_6 -alkyl, trifluoromethyl- C_1 - C_6 -alkyl, halo- C_1 - C_6 alkyl, alkoxycarbonylamino-C1-C6-alkyl and an amino- C_1 - C_6 -alkyl group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii) substituted with one or two radicals independently selected from the group 15 consisting of C₁-C₆-alkyl, ar-C₁-C₆-alkyl, cycloalkyl and C_1 - C_6 -alkanoyl, or wherein R^8 and R^9 and the carbon to which they are bonded form a carbonyl group, or wherein R^8 and R^9 together with the atoms to which they are bonded form a 5- to 8-membered 20 carbocyclic ring, or a 5- to 8-membered heterocyclic or heteroaryl ring containing one or two heteroatoms that are nitrogen, oxygen, or sulfur, with the proviso that only one of R⁸ and R⁹ is hydroxy; -Q-A-R-E-Y is a substituent in which the 25 moiety Q is a 6-membered heterocyclic ring containing one or two nitrogen atoms one of which is bonded the depicted phenyl group, and whose remaining members

(A-R-E-Y) are bonded at the 4-position relative to said phenyl-bonded nitrogen;

A is selected from the group consisting of

- (1) -0-;
- 5 (2) -S-;
 - $(3) NR^{17} -;$
 - (4) $-CO-N(R^{17})$ or $-N(R^{17})-CO-$, wherein R^{17} is hydrogen, C_1-C_4 -alkyl, or phenyl;
 - (5) -CO-O- or -O-CO-;
- 10 (6) -O-CO-O-;
 - (7) —HC=CH-;
 - (8) -NH-CO-NH-;
 - (9) —C≡C-;
 - (10) -NH-CO-O- or -O-CO-NH-;
- 15 (11) -N=N-;
 - (12) -NH-NH-; and
 - (13) $-CS-N(R^{18})-$ or $-N(R^{18})-CS-$, wherein R^{18} is hydrogen C_1-C_4 -alkyl, or phenyl; or
- 20 (14) A is absent and Q is bonded directly to R;

R is a moiety selected from the group consisting of alkyl, alkoxyalkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aralkyl, heteroaralkyl,

- heterocycloalkylalkyl, cycloalkylalkyl, cycloalkoxyalkyl, heterocycloalkoxyalkyl, aryloxyalkyl, heteroaryloxyalkyl, arylthioalkyl, heteroarylthioalkyl, cycloalkylthioalkyl, and a heterocycloalkylthioalkyl group wherein the aryl or
- 30 heteroaryl or cycloalkyl or heterocycloalkyl substituent is (i) unsubstituted or (ii) substituted

with one or two radicals selected from the group consisting of a halo, alkyl, perfluoroalkyl, perfluoroalkoxy, perfluoroalkylthio, trifluoromethylalkyl, amino, alkoxycarbonylalkyl, alkoxy, C₁-C₂-alkylene-dioxy, hydroxycarbonylalkyl, hydroxycarbonylalkylamino, nitro, hydroxy, hydroxyalkyl, alkanoylamino, and a alkoxycarbonyl group, and R is other than alkyl or alkoxyalkyl when A is -O- or -S-;

the moiety E is selected from the group consisting of

- (1) $-CO(R^{19})$ or $-(R^{19})CO$ -, wherein R^{19} is a heterocycloalkyl, or a cycloalkyl group;
- (2) —CONH- or -HNCO-; and
 - (3) -CO-;
 - (4) $-SO_2-R^{19}$ or $-R^{19}-SO_2$;
 - $(5) -SO_2 -;$
 - (6) $-NH-SO_2- \text{ or } -SO_2-NH-;$
- 20 (7) -S-;
 - (8) -NH-CO-O- or -O-CO-NH-; or
 - (9) E is absent and R is bonded directly to Y; and

the moiety Y is absent or is selected from
the group consisting of a hydrido, alkyl, alkoxy,
haloalkyl, aryl, aralkyl, cycloalkyl, heteroaryl,
hydroxy, aryloxy, aralkoxy, heteroaryloxy,
heteroaralkyl, perfluoroalkoxy, perfluoroalkylthio,
trifluoromethylalkyl, alkenyl, heterocycloalkyl,
cycloalkyl, trifluoromethyl, alkoxycarbonyl, and a
aminoalkyl group, wherein the aryl, heteroaryl,

aralkyl or heterocycloalkyl group is (i)

unsubstituted or (ii) substituted with one or two radicals independently selected from the group consisting of an alkanoyl, halo, nitro, aralkyl, aryl, alkoxy, trifluoroalkyl, trifluoroalkoxy and an amino group wherein the amino nitrogen is (i) unsubstituted or (ii) substituted with one or two groups independently selected from hydrido, alkyl, and an aralkyl group.

10 43. The compound or salt according to claim 42 wherein Z is O, S or NR^6 .

44. The compound or salt according to claim 42 wherein Z is NR⁶, and R⁶ is selected from the group consisting of C₃-C₆-cycloalkyl, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, amino-C₁-C₆-alkyl, aminosulfonyl, heteroaryl-C₁-C₆-alkyl, aryloxycarbonyl, and C₁-C₆-alkoxycarbonyl.

- 45. The compound or salt according to claim 42 wherein Z is O.
- 46. The compound or salt according to claim 42 wherein A is absent.
 - 47. The compound or salt according to claim 46 wherein said compound corresponds in structure to formula B-2A

- 48. The compound or salt according to claim 47 wherein said heterocyclic ring Q contains one nitrogen atom.
 - 49. The compound or salt according to claim 48 wherein said compound corresponds in structure to the formula

50. A compound corresponding in structure to formula B-3A, below, or a pharmaceutically acceptable salt thereof

HONH
$$S(0)_2$$
 $B-3A$

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wherein

z is selected from the group consisting of C(O), NR 6 , O, S, S(O), S(O) $_2$ and NS(O) $_2^{\rm R7};$

R⁶ is selected from the group consisting of hydrido, formyl, sulfonic-C₁-C₆-alkyl, C₁-C₆alkoxycarbonyl-C₁-C₆-alkyl, hydroxycarbonyl-C₁-C₆-5 alkyl, C_1 - C_6 -alkylcarbonyl- C_1 - C_6 -alkyl, R^8R^9 aminocarbonyl- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxycarbonyl- C_1 -C6-alkylcarbonyl, hydroxycarbonyl-C1-C6alkylcarbonyl, C₁-C₆-alkylcarbonyl-C₁-C₆alkylcarbonyl, C₁-C₆-alkoxycarbonylcarbonyl, 10 hydroxycarbonylcarbonyl, C₁-C₆-alkylcarbonylcarbonyl, R^8R^9 -aminocarbonylcarbonyl, C_1 - C_6 -alkanoyl, aryl- C_1 - C_6 -alkyl, aroyl, bis(C_1 - C_6 -alkoxy- C_1 - C_6 -alkyl)- C_1 - C_6 alkyl, C_1-C_6 -alkyl, C_1-C_6 -haloalkyl, C_1-C_6 perfluoroalkyl, C_1-C_6 -trifluoromethylalkyl, C_1-C_6 -15 perfluoroalkoxy-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆alkyl, C3-C6-cycloalkyl, heteroarycarbonyl, heterocyclocarbonyl, C3-C8-heterocycloalkyl, C3-C8heterocycloalkylcarbonyl, aryl, C5-C6-heterocyclo, C₅-C₆-heteroaryl, C₃-C₈-cycloalkyl-C₁-C₆-alkyl, 20 aryloxy-C₁-C₆-alkyl, heteroaryloxy-C₁-C₆-alkyl, $heteroary1-C_1-C_6-alkoxy-C_1-C_6-alky1$, heteroary1thio- C_1-C_6 -alkyl, arylsulfonyl, C_1-C_6 -alkylsulfonyl, C_5 -C6-heteroarylsulfonyl, carboxy-C1-C6-alkyl, C1-C4-

alkoxycarbonyl-C₁-C₆-alkyl, aminocarbonyl, C₁-C₆-alkyl(R⁸N)iminocarbonyl, aryl(R⁸N)iminocarbonyl, C₅-C₆-heterocyclo(R⁸N)iminocarbonyl, arylthio-C₁-C₆-

alkyl group;

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alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, arylthio-C₃-C₆-alkenyl, C₁-C₄-alkylthio-C₃-C₆-alkenyl, C₅-C₆-heteroaryl-C₁-C₆-alkyl, halo-C₁-C₆-alkanoyl, hydroxy-C₁-C₆-alkanoyl, thiol-C₁-C₆-alkanoyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₁-C₅-alkoxycarbonyl, aryloxycarbonyl, NR⁸R⁹-(R⁸)iminomethyl, NR⁸R⁹-C₁-C₅-alkylcarbonyl, hydroxy-C₁-C₅-alkyl, R⁸R⁹-aminocarbonyl, R⁸R⁹-aminocarbonyl, C₁-C₆-alkylcarbonyl, hydroxyaminocarbonyl, R⁸R⁹-aminosulfonyl, R⁸R⁹-aminosulfon-C₁-C₆-alkyl, R⁸R⁹-amino-C₁-C₆-alkylsulfonyl and an R⁸R⁹-amino-C₁-C₆-alkyls

 $\rm R^7$ is selected from the group consisting of a arylalkyl, aryl, heteroaryl, heterocyclo, $\rm C_1-C_6-$ alkyl, $\rm C_3-C_6-$ alkynyl, $\rm C_3-C_6-$ alkenyl, $\rm C_1-C_6-$ carboxyalkyl and a $\rm C_1-C_6-$ hydroxyalkyl group;

R⁸ and R⁹ are independently selected from the group consisting of a hydrido, hydroxy, C₁-C₆-alkyl, C₁-C₆-alkanoyl, aroyl, aryl, ar-C₁-C₆-alkyl, heteroar-C₁-C₆-alkyl, C₂-C₆-alkynyl, C₂-C₆-alkenyl, thiol-C₁-C₆-alkyl, C₁-C₆-alkylthio-C₁-C₆-alkyl, cycloalkyl, cycloalkyl-C₁-C₆-alkyl, heterocycloalkyl-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, aralkoxy-C₁-C₆-alkyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, hydroxy-C₁-C₆-alkyl, hydroxycarbonylar-C₁-C₆-alkyl, hydroxycarbonylar-C₁-C₆-alkyl, aryloxy-C₁-C₆-alkyl, aryloxy-C₁-C₆-alkyl,

alkyl, heteroaryloxy- C_1 - C_6 -alkyl, arylthio- C_1 - C_6 -alkyl, heteroarylthio- C_1 - C_6 -alkyl, the sulfoxide or sulfone of any said thio substituents, perfluoro- C_1 - C_6 -alkyl, trifluoromethyl- C_1 - C_6 -alkyl, halo- C_1 - C_6 -

- alkyl, alkoxycarbonylamino- C_1 - C_6 -alkyl and an amino- C_1 - C_6 -alkyl group wherein the aminoalkyl nitrogen is (i) unsubstituted or (ii) substituted with one or two radicals independently selected from the group consisting of C_1 - C_6 -alkyl, ar- C_1 - C_6 -alkyl, cycloalkyl
- and C₁-C₆-alkanoyl, or wherein R⁸ and R⁹ and the carbon to which they are bonded form a carbonyl group, or wherein R⁸ and R⁹ together with the atoms to which they are bonded form a 5- to 8-membered carbocyclic ring, or a 5- to 8-membered heterocyclic or heteroaryl ring containing one or two heteroatoms that are nitrogen, oxygen, or sulfur, with the proviso that only one of R⁸ and R⁹ is hydroxy;

-Q-E-Y is a substituent in which the moiety Q is a 6-membered heterocyclic ring containing one or two nitrogen atoms one of which is bonded the depicted phenyl group, and whose remaining members (E-Y) are bonded at the 4-position relative to said phenyl-bonded nitrogen atom;

in the substituent -E-Y, the moiety E is selected from the group consisting of

- (1) $-CO(R^{19})$ or $-(R^{19})CO$, wherein R^{19} is a heterocycloalkyl, or a cycloalkyl group;
- (2) —CONH- or -HNCO-; and

30 (3) -CO-;

- (4) -SO₂-R¹⁹- or -R¹⁹-SO₂-;
- $(5) -SO_2 -;$
- (6) $-NH-SO_2-$ or $-SO_2-NH-$;
- (7) -S-;

- (8) -NH-CO-O- or -O-CO-NH-; or
- (9) E is absent and Y is bonded directly to the ring Q; and

the moiety Y is absent or is selected from the group consisting of a hydrido, alkyl, alkoxy,

- haloalkyl, aryl, aralkyl, cycloalkyl, heteroaryl, hydroxy, aryloxy, aralkoxy, heteroaryloxy, heteroaralkyl, perfluoroalkoxy, perfluoroalkylthio, trifluoromethylalkyl, alkenyl, heterocycloalkyl, cycloalkyl, trifluoromethyl, alkoxycarbonyl, and a
- aminoalkyl group, wherein the aryl, heteroaryl, aralkyl or heterocycloalkyl group is (i) unsubstituted or (ii) substituted with one or two radicals independently selected from the group consisting of an alkanoyl, halo, nitro, aralkyl,
- aryl, alkoxy, trifluoroalkyl, trifluoroalkoxy and an amino group wherein the amino nitrogen is (i) unsubstituted or (ii) substituted with one or two groups independently selected from hydrido, alkyl, and an aralkyl group.

- 51. The compound or salt according to claim 50 wherein said heterocyclic ring Q contains two nitrogen atoms.
- 30 52. The compound or salt according to claim 51 wherein compound corresponds in structure to formula X

- 53. The compound or salt according to claim 50 wherein said heterocyclic ring Q contains one nitrogen atom.
 - 54. The compound or salt according to claim 53 wherein said compound corresponds in structure to formula IX-1

55. The compound or salt according to claim 53 wherein said compound corresponds in structure to formula IX-2

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56. The compound or salt according to claim 50 wherein Z is O, S or NR^6 .

57. The compound or salt according to claim 56 wherein Z is NR⁶, and R⁶ is selected from the group consisting of C₃-C₆-cycloalkyl, C₁-C₆-alkyl, C₃-C₆-alkenyl, C₃-C₆-alkynyl, C₁-C₆-alkoxy-C₁-C₆-alkyl, amino-C₁-C₆-alkyl, aminosulfonyl, heteroaryl-C₁-C₆-alkyl, aryloxycarbonyl, and C₁-C₆-alkoxycarbonyl.

10 58. The compound or salt according to claim 57 wherein said compound corresponds in structure to the formula

15 59. The compound or salt according to claim 57 wherein said compound corresponds in structure to the formula

20 60. The compound or salt according to claim 56 wherein Z is O.

20

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61. The compound or salt according to claim 60 wherein said compound corresponds in structure to the formula

62. A pharmaceutical composition that comprises a compound or salt according to claim 25 dissolved or dispersed in a pharmaceutically acceptable carrier.

- 63. A pharmaceutical composition that comprises a compound according to claim 42 dissolved or dispersed in a pharmaceutically acceptable carrier.
 - 64. A pharmaceutical composition that comprises a compound according to claim 47 dissolved or dispersed in a pharmaceutically acceptable carrier.
 - 65. A pharmaceutical composition that comprises a compound according to claim 50 dissolved or dispersed in a pharmaceutically acceptable carrier.
 - 66. A pharmaceutical composition that comprises a compound according to claim 56 dissolved

or dispersed in a pharmaceutically acceptable carrier.